Brief Communication

Health-Related Quality of Life among Employed and Unemployed Women: A Cross-sectional Study

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Abstract

Background: The general belief is that working women have better quality of life (QOL), yet the dual responsibility of home and workplace may have physiological or psychological issues. The study compares the Health-Related Quality of Life (HRQOL) of employed and unemployed women. **Material and Methods:** A descriptive study using convenience sampling technique was conducted, and the data were collected online using Google Forms. SF 36 questionnaire was used to assess the HRQOL of two groups aged 20 to 45 years age. The study participants were employed and unemployed women working or not working for 6 months or more. **Results:** The study results show that 72.80% of employed and 70% of unemployed women had good HRQOL. **Conclusions:** The study result reflects that both employed and unemployed women had good HRQOL. Our results reflect that the physical aspects of unemployed women were better than those of employed women, whereas employed women had better emotional wellbeing.

Keywords: *General health, health-related quality of life, psychological wellbeing, women*

Introduction

Women add to the other half of the population with around 662.90 million females in India. The role played by women is far greater and beyond a simple subset of just employed women or a housewife. Men and women are socially defined by their gender roles. Gender role performance is guided by socially accepted norms. Gender roles can be defined as the behavior, values, and attitudes that society consider appropriate for both male and female. Traditionally, men were the provider for the family and women were caretakers of both home and family.[1] Indian women have come a long way after independence, from being labeled as just a skilled housewife who manages home and family. Women today have acquired skills and capabilities like their male counterparts.[2] It is believed that a job is one of the most potent factors to improve women's quality of life. The level of education and employment status of a woman is strongly related to empowerment and her quality of life.[3] Both working women and housewives share a load of responsibilities. Women have become more assimilated into the workforce over recent decades. Due to improvement in social, political, educational, and financial improvements in women's status, there is a huge increase in female participation in the workforce.[4] Women often spend so much time helping others that they do not take time for themselves. Women have realized the considerable change in their work roles which may contribute to many health problems. Working women have to face major problems. They have to balance the work domain and family life domain. Women face various issues juggling the role of mother, partner, daughter, and employee. Carrying out these roles may affect the Quality of Life (QOL) of women.[1]

Employment is the most effective factor in improving the QOL of a person. Women are an integral part of our society. The health of a community is reflected by the health of women. In recent years, the attitude of women toward traditional roles has been changing, and now, women are ready to accept the challenging roles of meeting dual responsibilities of managing their employment and household chores. There is a drastic increase in the number of working women as there is a rise in education and job opportunities for women. One of the

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major reasons is an increase in financial demand to manage household necessities.[4] A woman who is employed outside their home rated themselves as more ambitious, self-reliant, and intelligent than an unemployed woman.[5] Employment status is a key social determinant of health. Unemployment adversely affects a person's wellbeing.[6] Working women may have challenges in fulfilling the demands of a family at home and the expectations of the employer at the workplace; on the other hand, a housewife may feel tired and irritated in caring for families at home and thankless household chores. One of the biggest causes of stress and irritation in housewives is financial dependence.[7] A person's health is influenced throughout their lifespan by many factors. Some of the most important factors include gender, racial ethnicity, culture, environment, and socioeconomic status. Researchers are discovering the critical roles that sex (being male or female) and gender identity (including social and cultural factors) play in health, wellness, and disease progression.[8]

QOL is a state of happiness and satisfaction that a woman gets from the role that she plays. QOL is the general wellbeing of individuals and societies. It observes the satisfaction toward life including physical health, family, education, employment, wealth, religious beliefs, finance, and the environment.[1] QOL is a broad multidimensional and dynamic concept that affects the performance of the individual in physical, psychological, social, and spiritual aspects of life.[9] World Health Organization (WHO) defines QOL as an individual's perception of their position in life in the context of the culture and value systems in which they live and in relation to their goals, expectations, standards, and concerns. It is a broad-ranging concept incorporating in a complex way the person's physical health, psychological state, level of independence, social relationships, personal beliefs, and their relationship to salient features of the environment.[10]

Health-Related Quality of Life (HRQOL) is a measure of the value assigned to the duration of life as modified by impairments, functional states, perceptions, and opportunities, as influenced by disease, injury, treatment, and policy.[11] WHO defines health as a "state of complete physical, mental and social wellbeing and not merely the absence of disease." According to CDC, "Health-Related Quality of Life is an individual's or a group's perceived physical and mental health over time." QOL is a complex concept in the field of health that is interpreted and defined in several ways within and between various disciplines and can be assessed by several instruments.[11] Women with equal or higher education compared to their male counterparts are still fundamentally bound to household work only. Even if they take up the role of being employed, they must do it along with their familial duties. Working women often suffer from several health issues, physical and psychological, due to their dual responsibilities at the workplace as well as carrying out a traditional role at home.[12] HRQOL was also defined by WHO (1997) as "individuals' perception of their position in life in the context of the culture and value systems in which they live and in relation to their goals, expectations, standards, and concerns"[13] In recent decades, the number of working women has increased in developed and developing countries. However, there is an exploration of the many variables related to employment status and HRQOL.[14] Being at the workplace and at home brings several challenges for women which influence their QOL of women. Current literature suggests that an employed woman had several responsibilities to perform as both an employee and a caregiver at home. This high pressure and workload may influence the QOL differently. The employed women experience financial independence and high self-esteem, and the unemployed women may experience insecurity and poor social life, but the HRQOL of both employed and unemployed women is affected due to their multiple roles.[15] Globally, women contribute to approximately 50% of working force as compared to 80% of men. The gender gap has been increased after COVID-19 pandemic.[16] A similar aftermath has been observed in India, where the decline is approximate 16–20%.[17,18] In a recent study, the female labor force participation rate (FLFPR) in India is approximately 33%.[19] Indian culture is very different from the western world and the responsibilities catered by women are entirely distinct, and there are very few published studies from Indian context. Thus, researchers felt the need to conduct a cross-sectional study to assess and compare women's HRQOL in both the dimensions of employed and unemployed.

Material and Methods

A cross-sectional descriptive study was conducted with 205 participants from western Rajasthan. The sample size was calculated by using the formula z^2 (pq)/d^2, considering India's female labor percentage during COVID time as 16% as the population proportion (p) with 95% confidence level (z) and 5% margin of error (d).[17] The study participants were employed and unemployed women of the 20 to 45 years age group. Employed and unemployed women with an educational qualification of higher secondary and/or above and a duration of employment/unemployment of 6 months or more were included in the study. Data were collected from June 2021 to February 2022. The surveys were converted to online forms using Google Forms, and a link was sent to subjects through email and WhatsApp. The completed forms that were received within the study window were analyzed. The tools used for study consist of sociodemographic data and a questionnaire for HRQOL.

Sociodemographic data were collected from women including their employment status, age, education, marital status, family type, number of children, any history of miscarriage or abortion, family income, and residential area. Data were also collected regarding the duration of

employment or unemployment, the nature of work, and the number of working hours. Additional information was collected regarding the occupation of the husband, history of illness, and duration of treatment for that illness.

The Medical Outcome Study Short Form 36 (SF-36) was used to measure the HRQOL. The reliability of the SF-36 was 0.80.[20] Estimates of reliability in the physical and mental sections were typically above 0.90. The tool was also well validated. SF-36 consists of eight key health concepts, which include physical functioning, role limitations due to physical health problems, bodily pain, general health, vitality, social functioning, role limitations due to emotional problems, and mental health. From the eight scales, the survey generated overall physical and mental health component summary scores. The scores were drawn by weighted sums of the questions in each section, and the scores range from 0 to 100, where lower scores reflect more disability, and higher scores reflect less disability.

The validated data collection tools were converted to Google Forms. The questions were prepared in Hindi and English. The link was created and circulated via email and WhatsApp.

IBM SPSS Statistics for Windows, Version 20.0 (IBM Corp., Armonk, New York) was used to analyze the data. Demographic data were represented as frequency and percentage. The SF-36 score was presented domain-wise as mean, SD, and mean difference. An independent *t*-test was used to analyze the difference between the groups. The Chi-square test was used to determine the associations between sociodemographic data and HRQOL of employed and unemployed women. For all the data, $p<0.05$ was considered significant.

Ethical consideration

The proposed study received ethical clearance from the Institutional Ethical Committee, and the reference number is AIIMS/IEC/2021/3519 dated 03/062021. Informed consent was taken from all respondents for inclusion in the study.

Results

Table 1 shows that the online survey was completed by 205 participants; among them, 125 (61%) were employed and 80 (39%) were unemployed. 87.20% of employed and 85% of unemployed women were graduates or above. Approximately 3/4th of the participants were married in both groups. Half of the employed women (49.60%) had two or more children, whereas 37.50% of unemployed women had one child. Most of the employed women (72.80%) and unemployed women (82.50%) never had any abortions or miscarriages. The family income of 40% of unemployed and employed women was up to INR 30000 and 70000, respectively. More than 80% of participants in both groups were having more than 6 months of employment or unemployment.

Figure 1 depicts the HRQOL among employed and unemployed women. It was observed that 72.80% of employed and 70% of unemployed women had a good QOL.

Table 2 illustrates that the mean difference of SF-36 HRQOL score was more among employed women in domains like General health (5.07), Role limitation due to physical health (4.25), Pain (5.34), and Emotional wellbeing (4.45).

The domain-wise mean score is presented in Figure 2. The mean score of general health among employed women (60.90) was better than that of unemployed women (55.80). The emotional wellbeing of employed women (64.40) was good as compared with unemployed women (59.90), whereas role limitation due to emotional problems was somewhat less in employed women (58.70). The domain of bodily pain was higher in employed (70) as compared with unemployed women (64.70), which infers that bodily pain had lesser limitation of activities among employed women. The role limitation due to physical health was observed more in employed (58) as compared to unemployed women (53.80). The mean scores of Energy/Fatigue and total physical functioning were marginally equal.

Table 3 interprets that there was a significant association between the HRQOL of employed women with marital status and the nature of work at $p<0.05$. A significant association was also found between HRQOL of unemployed women's educational status, marital status, and miscarriage at $p<0.05$.

Discussion

This cross-sectional descriptive study was designed to assess the HRQOL of employed and unemployed women.

The findings of our study suggested that the physical aspects of unemployed women were better than those

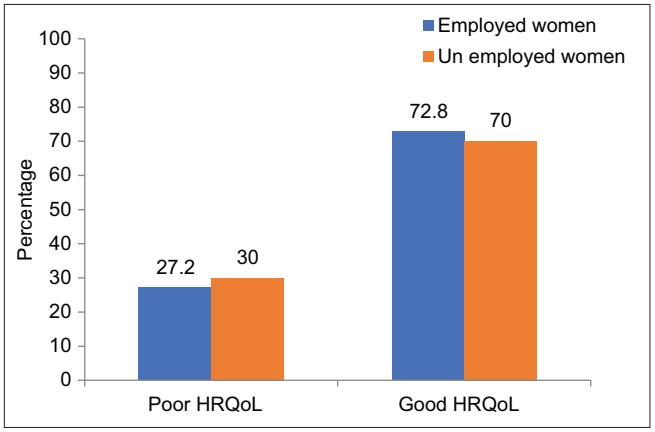

Figure 1: HRQOL among employed and unemployed women

Table 1: Demographic characteristics of women *n*=205

Characteristics	Employed (*n*=125) Frequency (%)	Unemployed (*n*=80) Frequency (%)
Age (years)		
20-30	36 (28.80)	40 (50.00)
31-35	43 (34.40)	16 (20.00)
36-40	31 (24.80)	15 (18.80)
41-45	15 (12.00)	09 (11.20)
Educational status		
Up to Higher Secondary	16 (12.80)	12 (15.00)
Graduate/above	109 (87.20)	68 (85.00)
Marital status		
Married	97 (77.60)	60 (75.00)
Unmarried/widowed/divorced	28 (22.40)	20 (25.00)
Type of family		
Nuclear	69 (55.20)	48 (60.00)
Joint/extended	56 (44.80)	32 (40.00)
No of children		
None	27 (21.60)	24 (30.00)
One	36 (28.80)	30 (37.50)
Two/more than two	62 (49.60)	26 (32.50)
Miscarriage/abortion		
None	91 (72.80)	66 (82.50)
One	20 (16.00)	11 (13.80)
Two/more than two	14 (11.20)	03 (03.80)
Family income Rupees		
Up to 30000	39 (31.20)	32 (40.00)
30001–50000	19 (15.20)	20 (25.00)
50001–70000	17 (13.60)	11 (13.80)
More than 70000	50 (40.00)	17 (21.30)
Residential area		
Rural	21 (16.80)	18 (22.50)
Urban	77 (61.60)	40 (50.00)
Semi urban	27 (21.60)	22 (27.50)
Duration of employment status		
Six months	13 (10.40)	16 (20.00)
More than six months	112 (89.60)	64 (80.00)
Nature of work		
Long standing	54 (43.20)	11 (13.80)
Office/Sitting work	68 (54.40)	26 (32.50)
Work from home/house hold work	03 (02.40)	43 (53.80)
No of working hours		
<six	09 (07.20)	16 (20.00)
Six to eight	72 (57.60)	39 (48.80)
More than eight	44 (35.20)	25 (31.30)
Current/past history of illness		
No	96 (76.80)	57 (71.30)
Yes	29 (23.20)	23 (28.80)

Contd...

Table 1: Contd...

Characteristics	Employed (*n*=125) Frequency (%)	Unemployed (*n*=80) Frequency (%)
Duration of treatment		
<six months	104 (83.20)	65 (81.20)
More than six months	21 (16.80)	15 (18.80)
Occupation of husband		
Not working	29 (23.20)	27 (33.80)
Self-employed	18 (14.40)	12 (15.00)
Government service	20 (16.00)	11 (13.80)
Private employee	58 (46.40)	30 (37.50)

Table 2: Mean score of HRQOL among employed and unemployed women

SF-36 Domains	Employed (*n*=125) M (SD)*	Unemployed (*n*=80) M (SD)*	Mean difference**	Independent *t*-test***	*p*****
General health score	60.90 (18.40)	55.80 (17.20)	5.07	1.97	0.050
One year (health change)	53.40 (23.40)	55.00 (23.30)	-1.60	0.48	0.633
Physical functioning	56.40 (27.80)	58.90 (24.20)	-2.50	0.66	0.510
Role limitation due to physical health	58.00 (37.50)	53.80 (38.40)	4.25	0.78	0.434
Role limitation due to emotional problems	58.70 (40.30)	59.20 (40.00)	-0.50	0.09	0.931
Social functioning	63.60 (22.80)	65.20 (21.30)	-1.56	0.49	0.626
Pain	70.00 (21.40)	64.70 (22.30)	5.34	1.72	0.088
Energy/fatigue	55.80 (18.60)	55.10 (16.90)	0.70	0.27	0.786
Emotional well being	64.40 (19.40)	59.90 (16.50)	4.45	1.70	0.091

*Mean (Standard Deviation); **Mean difference; ***Independent *t*-test; ****p

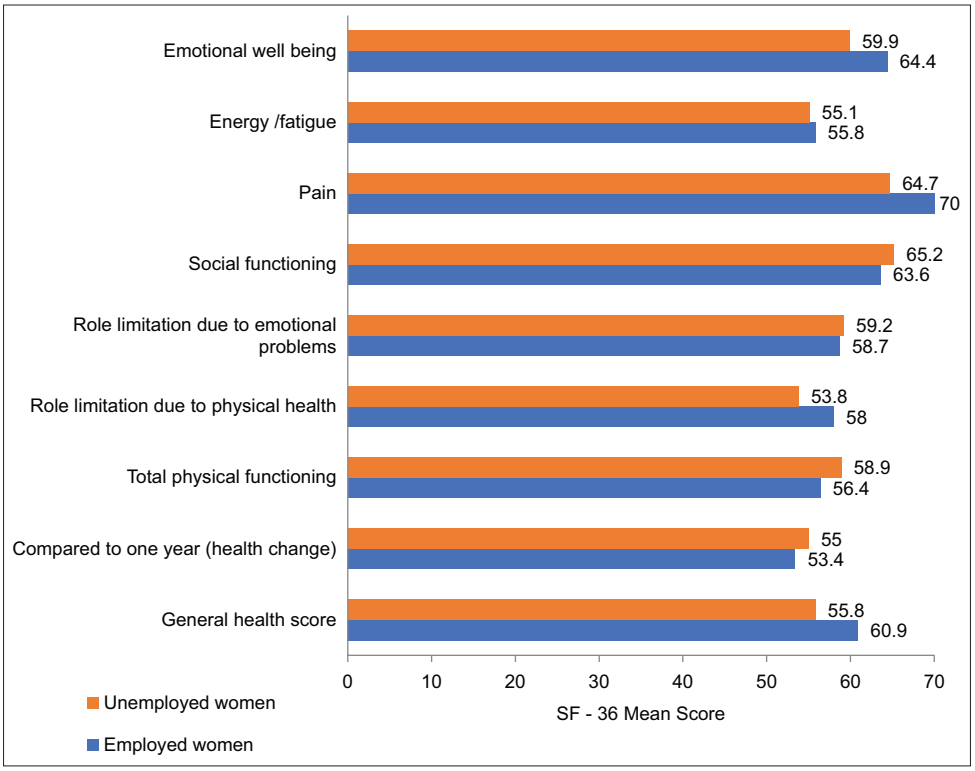

Figure 2: Comparison of SF-36 HRQOL mean score in employed and unemployed women

of employed women**.** Anand S *et al*.[1] reported a similar association wherein 60% of unemployed women depicted better physical health. Contrast was also reported as this study[1] reflects unemployed women have better psychological health, whereas in our study, emotional health was better in employed females.

Table 3: Association between sociodemographic characteristics of study participants and HRQOL$_s$

Characteristics	Employed women (*n*=125)			Unemployed women (*n*=80)		
	Poor HRQOL *f* (%)	Good HRQOL *f* (%)	Chi/Fishers*** and *p**	Poor HRQOL *f* (%)	Good HRQOL *f* (%)	Chi/Fishers*** and *p**
Employment status vs. HRQOL	34 (27.20)	91 (72.80)	-	24	56	0.19(.664)
Educational status						
Up to Higher Secondary	26 (20.80)	83 (66.40)	3.59	17 (21.25)	51 (63.75)	3.93
Graduate/above	08 (06.40)	08 (06.40)	(0.058)**	07 (08.75)	05 (06.25)	(0.048)*,**
Marital status						
Married	22 (17.60)	75 (60.00)	4.47	22 (27.50)	38 (47.50)	5.08
Unmarried/widowed/divorced	12 (09.60)	16 (12.80)	(0.035)*	02 (02.50)	18 (22.50)	(0.024)*
Miscarriage/abortion						
None	25 (20.00)	66 (52.8)	0.32	21 (26.25)	45 (56.25)	4.16
One	06 (04.80)	14 (11.2)	(0.839)***	01 (01.25)	10 (12.50)	(0.039)*,***
Two/more than two	03 (02.40)	11 (08.8)		02 (02.50)	01 (01.25)	
Nature of work						
Long standing	21 (16.80)	33 (26.40)	7.14	03 (03.75)	08 (10.00)	0.10
Office/Sitting work	12 (09.60)	56 (44.80)	(0.020)*,***	08 (10.00)	18 (22.50)	(1.000)***
Work from home/house work	01 (00.80)	02 (01.60)		13 (16.25)	30 (37.50)	
No of working hours						
<Six	03 (02.40)	06 (04.80)	0.37	05 (06.25)	11 (13.75)	3.99
Six to eight	19 (15.20)	53 (42.40)	(0.844)***	08 (10.00)	31 (38.75)	(0.112)***
More than eight	12 (09.60)	32 (25.60)		11 (13.75)	14 (17.50)	

$HRQOL – Health-Related Quality of Life; *f* – frequency. *$p<0.05$; **Yates continuity correction; ***Fishers' exact test

In a study conducted by Ranjan Vyas, women of lower socioeconomic status have shown greater symptoms of anxiety, stress, and depression and there was no significant difference with reference to working and nonworking conditions,[2] whereas in our study, no association was observed with income.

In our study, the mean (SD) score of general health, using the SF-36 questionnaire, of employed women was 60.90 (18.40). The findings of our study are consistent with studies conducted by Kerman Saravi *et al*.[3] and Vernekar SP *et al*.,[4] wherein the mean score (SD) of the general health of employed women was 62.60 (20.30) and 63.80 (15.17), respectively. In a similar context, our study reflected the mean score of the general health of unemployed women as 55.80 (17.20), which is almost like the mean score reported by a few studies[3,4] as 54.50 (40.30) and 50.20 (10.50). In general, it can be assumed that, when measured by the SF-36 questionnaire, the mean score of the general health of employed women ranges between 60 and 64, and for unemployed women, it ranges between 50 and 56. A study conducted by Shinjan Ghosh also reported that working mothers have good QOL than nonworking mothers.[21] Therefore, the general health of employed women was found to be better.

The study identified no significant difference in HRQOL among employed and unemployed women. These results are akin to study results conducted by Kerman Saravi *et al*.[3] and distinct from the study where working women reported good HRQOL in all domains of SF-36 except the physical domain.[4]

A study conducted by Ahman M *et al*. reported that there was no difference between married working women and housewives in physical health, whereas there was a difference in psychological, social, and environmental aspects.[14]

Our study reported that employed women had comparatively little less physical wellbeing. This supports the study conducted by Kerman Saravi *et al*.[3] wherein employed women scored higher than housewives on all subscales except for physical performance. This finding is also in contrast with study findings by Vernekar SP and Shah[4] where employed and unemployed women reported equal mean, that is, 60 in the physical functioning domain.

This is one of the few studies conducted on Indian women after the COVID-19 pandemic. Authors included multiple demographic variables to find the association with HRQOL. The study assesses the HRQOL of employed and unemployed women but lacks the exploration about the cultural issues which may affect the same in a variety of ways. The study has used a single questionnaire to assess multiple domains. The study has less sample size, a one time survey method, and samples from a particular western part of India, which may restrict the generalization of study findings and are the limitations of this study.

Conclusion

The findings of this study suggest that both employed and unemployed women have good HRQOL, and among them, employed women had comparatively little better HRQOL. The study also suggested that the physical aspects of unemployed women were better than those of employed women, whereas employed women had better emotional wellbeing. The findings of the study trigger to have sincere and dedicated exploration of the "Why" behind these findings. As women are the fundament for a happy and healthy family, measures should be initiated to boost the physical health outcome of employed females and emphasis should be given to improving the emotional health of unemployed women. Essentially, initiatives should be taken to improve and maintain the overall QOL of women.

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Conflicts of interest

There are no conflicts of interest.

References

1. Anand S, Sharma M. A comparative study on the quality of life of working and non-working females. Int J Health Sci Res 2017;7:256-9.
2. Vyas R. Level of anxiety, depression and stress among working and non-working women. Int J Indian Psychol 2019;7:801-6.
3. Saravi FK, Navidian A, Rigi SN, Montazeri A. Comparing health-related quality of life of employed women and housewives: A cross-sectional study from southeast Iran. BMC Womens Health 2012;12:41.
4. Vernekar SP, Shah HK. A comparative study of health-related quality of life among working and non-working married women in an urban area in South Goa. Int J Prev Curative Community Med 2019;5. doi: 10.24321/2454.325X.201914.
5. Arshad M, Gull S, Mahmood K. Life satisfaction among working and non-working women. Eur J Res Soc Sci 2015;3:121-7.
6. Irfan M, Kaur N, Panwar N, Thind HS. A comparative study of working and non-working married women: Effect of anxiety level on life satisfaction. Indian J Psychol Ment Health 2012;6:169-78.
7. Barahmand U, Nafs AN. A comparison of working and non-working women in terms of self-differentiation, partner abuse, conflict resolution tactics, marital satisfaction and quality of life. Int J Behav Res Psychol 2013;1:5-11.
8. National Institute of Health. Putting science to work for the health of women. Available from: https://orwh.od.nih.gov/research/resources. [Last accessed on 2024 Jan 14].
9. Rezaei N, Azadi A, Zargousi R, Sadoughi Z, Tavalaee Z, Rezayati M. Maternal health-related quality of life and its predicting factors in the postpartum period in Iran. Scientifica (Cairo) 2016;2016:8542147.
10. Available from: http://depts.washington.edu/seaqol/docs/WHOQOL_Bibliography.pdf. [Last accessed on 2024 Jan 14].
11. Haraldstad K, Wahl A, Andenæs R, Andersen JR, Andersen MH, Beisland E, *et al*. A systematic review of quality-of-life research in medicine and health sciences. Qual Life Res 2019;28:2641-50.
12. Shambunath B. Working Women: A Study on Health Status [dissertation]. Karnataka: Gulbarga University; 2015. Available from: http://hdl.handle.net/10603/42034. [Last accessed on 2024 Jan 14].
13. Sosnowski R, Kulpa M, Ziętalewicz U, *et al*. Basic issues concerning health-related quality of life. Cent European J Urol 2017;70:206-11.
14. Ahmad M, Khan A. Quality of Life Among Married Working Women and Housewives. 2018. Available from: https://www.researchgate.net/publication/326584124_Quality_of_Life_Among_Married_Working_Women_and_Housewives. [Last accessed on 2024 Jan 14].
15. Guallar-Castillón P, Sendino AR, Banegas JR, López-García E, Rodríguez-Artalejo F. Differences in quality of life between women and men in the older population of Spain. Soc Sci Med 2005;60:1229-40.
16. Female labor force participation - World Bank Gender Data Portal. Available from: https://genderdata.worldbank.org/data-stories/flfp-data-story/. [Last accessed on 2024 Jan 14].
17. Kumar M. India's female labour participation rate falls to 16.1% as pandemic hits jobs. Reuters 2021. Available from: https://www.reuters.com/world/india/indias-female-labour-participation-rate-falls-161-pandemic-hits-jobs-2021-08-03/. [Last accessed on 2024 Jan 12].
18. Bhattacharya J. Effect of COVID-19 on women employment in India. Int J Creative Res Thought 2021;9:2442-4.
19. Available from: Female_Labour_Utilization_in_India_April_2023_final__1_-pages-1-2-merged__1_.pdf. [Last accessed on 2024 Jan 14].
20. Brazier JE, Harper R, Jones NM, O'Cathain A, Thomas KJ, Usherwood T, *et al*. Validating the SF-36 health survey questionnaire: new outcome measure for primary care. BMJ 1992;305:160-4.
21. Ghosh S. Quality of life among working and nonworking mothers in Kolkata. Int J Indian Psychol 2019;7:672-9.